Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-18. (canceled).

19. (currently amended) A method for forming a connective tissue construct, comprising:

providing a substrate;

securing at least two anchors to the substrate in spaced relationship;

providing fibroblast cells on the substrate without disposing the cells within an exogenous scaffold material ~~in the absence of a synthetic matrix~~, wherein at least some of the cells are in contact with the anchors; and

culturing the fibroblast cells *in vitro* ~~under conditions to allow the cells to become confluent between the anchors~~,

wherein the anchors are receptive to the cells and allow the cells to attach thereto and become confluent between the anchors while permitting the cells to detach from the substrate and form a three-dimensional connective tissue construct.

20. (original) The method according to claim 19, wherein providing fibroblast cells includes deriving the fibroblast cells from tendon tissue.

21. (original) The method according to claim 19, wherein providing fibroblast cells includes deriving the fibroblast cells from tendon tissue.

22. (original) The method according to claim 19, wherein providing the fibroblast cells includes deriving the fibroblast cells from stem cells.

23. (original) The method according to claim 19, wherein culturing the fibroblast cells allows the cells to self-organize to form the three-dimensional connective tissue construct.

24. (original) The method according to claim 19, wherein the anchors include silk suture segments coated with cell adhesion molecules.

25. (original) The method according to claim 24, wherein the cell adhesion molecules include laminin.

26. (currently amended) The method according to claim 19, wherein the anchors include ~~a bone-like substrate~~ at least one of hydroxyapatite and calcium phosphate.

27. (original) The method according to claim 19, further comprising coating the substrate with cell adhesion molecules.

28. (original) The method according to claim 27, wherein the cell adhesion molecules include laminin.

29. (original) The method according to claim 28, wherein the concentration of laminin is about 1.5 to 3.0 $\mu g/cm^2$.

30. (original) The method according to claim 27, wherein the cell adhesion molecules include thrombin.

31. (original) The method according to claim 19, further comprising incubating the substrate and anchors with a growth medium prior to providing fibroblast cells on the substrate.

32. (original) The method according to claim 19, further comprising disposing the fibroblast cells in a growth medium prior to becoming confluent, and disposing the fibroblast cells in a differentiation medium after becoming confluent.

33. (original) The method according to claim 19, further comprising supplementing the fibroblast cells with ascorbic acid.

34. (original) The method according to claim 33, wherein the ascorbic acid includes approximately 100 μg/ml of L-ascorbic acid 2-phosphate.

35. (original) The method according to claim 19, further comprising measuring a functional property of the connective tissue construct and using the measured property as feedback to control the formation of the connective tissue construct.

36. (original) The method according to claim 35, wherein the functional property includes a tensile strength of the connective tissue construct.

37. (original) The method according to claim 19, further comprising culturing myogenic precursor cells in combination with the fibroblast cells.

38. (original) The method according to claim 19, further comprising harvesting the fibroblast cells from mammalian tissue.

39. (original) The method according to claim 19, further including implanting the connective tissue construct in a suitable recipient.

40. (currently amended) A method for forming a tendon construct, comprising:
providing a substrate;
securing at least two anchors to the substrate in spaced relationship;

providing a medium including fibroblast cells and ascorbic acid on the substrate without disposing the cells within an exogenous scaffold material, wherein at least some of the cells are in contact with the anchors; and

culturing the fibroblast cells *in vitro* ~~under conditions to allow the cells to self-organize and become confluent between the anchors~~,

wherein the anchors are receptive to the cells and allow the cells to attach thereto and become confluent between the anchors while permitting the cells to detach from the substrate and form a three-dimensional tendon construct.